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C07K 14/51, C12N 5/10,  
C07K 16/22, A61K 38/18

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(54) **Human cartilage GP 39-like gene**

(57) HC gp39-L polypeptides and DNA (RNA) encoding such HC gp39-L and a procedure for producing such polypeptides by recombinant techniques is disclosed. Also disclosed are methods for utilizing such HC gp39-L for the treatment of rheumatoid and osteoarthritis, osteoporosis, arteriosclerosis, metastatic cancers, periodontia, chronic renal diseases, etc. Antagonists against such HC gp39-L and their use as a therapeutic

to treat rheumatoid and osteoarthritis, osteoporosis, arteriosclerosis, metastatic cancers, periodontia, chronic renal diseases, etc. are also disclosed. Also disclosed are diagnostic assays for detecting diseases related to mutations in the nucleic acid sequences and altered concentrations of the polypeptides. Also disclosed are diagnostic assays for detecting mutations in the polynucleotides encoding the HC gp39-L and for detecting altered levels of the polypeptide in a host.

EP 0 823 478 A3



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# PARTIAL EUROPEAN SEARCH REPORT

Application Number

which under Rule 45 of the European Patent Convention EP 97 30 6053  
shall be considered, for the purposes of subsequent  
proceedings, as the European search report

| DOCUMENTS CONSIDERED TO BE RELEVANT  |  |   |   |
|--|--|---|---|
| Category   | Citation of document with indication, where appropriate, of relevant passages  | Relevant to claim   | CLASSIFICATION OF THE APPLICATION (Int.Cl.6)                              |
| X  | DATABASE EMHUM2<br>Accession No. HSU58514, 26 July 1996<br>GROSSMAN ET AL.: "Cloning of a novel lymphoid restricted human chitinase and localization to lp13.3 (unpublished)"<br>XP002107913<br>* abstract * | 1-22  | C12N15/12<br>C07K14/50<br>C07K14/51<br>C12N5/10<br>C07K16/22<br>A61K38/18 |
| X  | DATABASE EMHUM2<br>Accession No. HSU58515, 26 July 1996<br>GROSSMAN ET AL.: "Cloning of a novel lymphoid restricted human chitinase and localization to lp13.3 (unpublished)"<br>XP002107914<br>* abstract * | 1-3,6-8, 21,22  |   |
|  |  |   | TECHNICAL FIELDS SEARCHED (Int.Cl.6)                                      |
|  |  |   | C12N<br>C07K  |
| INCOMPLETE SEARCH  |  |   |   |
| <p>The Search Division considers that the present application, or one or more of its claims, does/do not comply with the EPC to such an extent that a meaningful search into the state of the art cannot be carried out, or can only be carried out partially, for these claims.</p> <p>Claims searched completely :</p> <p>Claims searched incompletely :</p> <p>Claims not searched :</p> <p>Reason for the limitation of the search:</p> <p>see sheet C</p> |  |   |   |
| Place of search  |  | Date of completion of the search  | Examiner  |
| MUNICH   |  | 2 July 1999   | Sprinks, M  |
| CATEGORY OF CITED DOCUMENTS  |  | <p>T : theory or principle underlying the invention</p> <p>E : earlier patent document, but published on, or after the filing date</p> <p>D : document cited in the application</p> <p>L : document cited for other reasons</p> <p>A : member of the same patent family, corresponding document</p> |   |
| <p>X : particularly relevant if taken alone</p> <p>Y : particularly relevant if combined with another document of the same category</p> <p>A : technological background</p> <p>O : non-written disclosure</p> <p>P : intermediate document</p>   |  |   |   |

EPO FORM 1600 03.92 (P4/C07)



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INCOMPLETE SEARCH  
SHEET C

Application Number

EP 97 30 6053

This search report has not been established in respect of certain claims, because they relate to subject matter that does not comply with the provisions of the European Patent Convention, namely:

Claim(s) searched completely:  
1-12,14,16,17,19-22

Claim(s) not searched:  
13,15,18

Reason for the limitation of the search:

It is not possible to carry out a meaningful search into the state of the art on the basis of claims 13 and 15 because their subject-matter ("agonists" and "antagonists") is structurally undefined and could not in any event have been functionally tested in the prior art (Article 92 and Rule 45 EPC). The same is true of claim 18 insofar as it refers to a method using the undefined subject-matter mentioned above.



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## PARTIAL EUROPEAN SEARCH REPORT

Application Number  
EP 97 30 6053

| DOCUMENTS CONSIDERED TO BE RELEVANT |   |                         | CLASSIFICATION OF THE APPLICATION (Int.Cl.6) |
|-------------------------------------|---|-------------------------|--|
| Category                            | Citation of document with indication, where appropriate, of relevant passages   | Relevant to claim       |  |
| P,X                                 | HU B., TRINH K., FIGUEIRA W. F., PRICE P. A.: "Isolation and sequence of a novel human chondrocyte protein related to mammalian members of the chitinase protein family"<br>JOURNAL OF BIOLOGICAL CHEMISTRY, vol. 271, no. 32, 9 August 1996, pages 19415-19420, XP002107912<br>* figures 4, AND, 6 * | 1-22                    |  |
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**ANNEX TO THE EUROPEAN SEARCH REPORT  
ON EUROPEAN PATENT APPLICATION NO.**

EP 97 30 6053

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.  
The members are as contained in the European Patent Office EDP file on  
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02-07-1999

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For more details about this annex : see Official Journal of the European Patent Office, No. 12/82